AMENDMENTS TO THE SPECIFICATION:

Page 1, before line 1, please insert the following:

This application is a divisional of Application No. 09/971,020 filed October 5, 2001, which claims the priority under 35 U.S.C. §§ 119 and/or 365 to Japanese Application No. 2000-307149 filed October 6, 2000.

Please replace Paragraph 0008, at Page 3, with the following:

[0008] The present application will be further explained in detail hereafter with reference to the accompanying drawings, in which:

Fig. 1 is a drawing showing the pathway of caffeine biosynthesis;

Fig. 2 is a drawing showing base sequences of cDNAs obtained from MTL1, MTL2, MTL3 and MXMT1. Fig. 2A shows the base sequence of cDNA obtained on clone #1 (SEQ ID NO: 4). Fig. 2B shows the base sequence of cDNA obtained on clone #6 (SEQ ID NO: 6). Fig. 2C shows the base sequence of cDNA obtained on clone #35 (SEQ ID NO: 8). Fig. 2D shows the base sequence of cDNA obtained on clone #45 (SEQ ID NO: 2);

Fig. 3 is a drawing showing alignment of amino acid sequences obtained from MXMT1 (SEQ ID NO: 2), MTL1 (SEQ ID NO: 4), MTL2 (SEQ ID NO: 6) and MTL3 (SEQ ID NO: 8);

Fig. 4 is a photograph showing the results of SDS-PAGE analyses performed on fusion proteins obtained from MTL2, MTL3 and MXMT12;

Fig. 5 is a photograph showing the results of TLC to analyze enzymatic activities of the fusion proteins obtained from MTL2, MTL3 and MXMT1; and

Figs. 6A-6E show results of HPLC performed to identify reaction products in the enzymatic reaction mixture of the fusion protein obtained from MXMT1 identified by HPLC.

Please replace Paragraph 0018, beginning at Page 7, with the following:

[0018] A pair of degenerate oligonucleotide (Forward primer, GGITGYDSIDSIGGICCIAAYAC (SEQ ID NO: 9); Reverse primer, ARIYKIYYRTRRAAISWICCIGG (SEQ ID NO: 10) was synthesized, based on the region conserved among TCS1 (Kato et al., 2000, GenBank accession no. AB031280) and two proteins (Z99708 and AC008153), with their functions unknown, of Arabidopsis thaliana.

These oligonucleotides correspond to amino acid sequences of GC(A/S)(A/S)GPNT (SEQ ID NOS: 11-14) and PGSF(H/Y)(G/K)(R/N)LF (SEQ ID NOS: 15-22), respectively. In a 25 μl of reaction mixture containing Coffea arabicas cDNA and the above-mentioned primer pair, PCR was performed under the conditions described below. That is, after reaction at 94°C for one minute, 30 cycles of denaturation at 94°C for 30 seconds, annealing at 52°C for 30 seconds and extension at 72°C for one minute was performed, which was followed by a final extension at 72°C for 7 minutes, whereby the PCR reaction was completed. The amplified cDNA fragment of bout 270 base pairs was used for screening of cDNA library. (cDNA library construction and screening)

Pursuant to 37 C.F.R. § 1.821-1.825, please replace the Sequence Listing found at Paragraph 0027, Pages 12-17, with the attached Substitute Sequence Listing.

Please cancel the current Abstract and replace it with the following new Abstract: